

Listing of the Claims

Claims 1-25 (Cancelled)

26. (New) A method for providing data, the method comprising the steps of:
- receiving a request to create a virtual data store that reflects a state of an original data store at a specified time, the specified time selected from a substantially continuous time interval;
 - receiving a storage protocol request for data at a specified address in the virtual data store; and
 - transmitting data stored in the original data store at the specified address at the specified time in response to the storage protocol request.
27. (New) The method of claim 26 wherein the original data store comprises another virtual data store.
28. (New) The method of claim 27 wherein the original data store comprises a current store and a time store.
29. (New) The method of claim 26 wherein the virtual data store comprises a logical unit.
30. (New) The method of claim 29 wherein both the request to create the virtual data store and the storage protocol request are received in a single protocol request packet.
31. (New) The method of claim 29 wherein the request to create the virtual data store is received in a different data packet than the storage protocol request.
32. (New) The method of claim 26 wherein the request to create the virtual data store is received via a user interface.
33. (New) The method of claim 26 wherein the request to create the virtual data store is received via the storage protocol request.
34. (New) The method of claim 26 wherein the storage protocol request comprises a standard read request.
35. (New) The method of claim 34 wherein the storage protocol request comprises a SCSI read request.
36. (New) The method of claim 26 wherein the storage protocol request comprises a Fibre Channel protocol request.

37. (New) The method of claim 26 wherein the storage protocol request is received over a Fibre Channel physical layer.
38. (New) The method of claim 26 wherein the request to create the virtual data store is received from a host.
39. (New) The method of claim 26 wherein the request to create the virtual data store is received from a network.
40. (New) The method of claim 26 wherein the original data store comprises a current store and a time store.
41. (New) The method of claim 26 wherein the virtual data store comprises a current store and a time store.
42. (New) The method of claim 26 wherein the original data store comprises at least one terabyte of data.
43. (New) The method of claim 42 wherein the original data store comprises multiple physical storage devices.
44. (New) The method of claim 43 wherein the multiple physical storage devices comprise at least ten physical storage devices.
45. (New) The method of claim 44 wherein the multiple physical storage devices comprise at least 100 physical storage devices.
46. (New) The method of claim 26 wherein the virtual data store comprises a read only data store.
47. (New) The method of claim 26 wherein the substantially continuous time interval is the interval between a past time and a current time.
48. (New) The method of claim 26 wherein the data is transmitted substantially instantaneously in response to the storage protocol request.
49. (New) The method of claim 48 wherein the data is transmitted in less than 1 millisecond.
50. (New) The method of claim 26, further comprising the step of writing data to the virtual data store in response to a storage protocol write request.
51. (New) The method of claim 50 wherein the storage protocol write request comprises a standard write request.

52. (New) The method of claim 51 wherein the storage protocol write request comprises a SCSI write request.
53. (New) The method of claim 50 wherein the storage protocol write request comprises a Fibre Channel protocol request.
54. (New) A method for providing data, the method comprising the steps of:
generating, substantially instantaneously, a virtual data store that reflects the state of an original data store at a specified time;
receiving a storage protocol request for data at a specified address in the virtual data store; and
transmitting data stored in the original data store at the specified address at the specified time in response to the storage protocol request.
55. (New) The method of claim 54 wherein the specified time is selected from a substantially continuous time interval.
56. (New) The method of claim 55, further comprising the step of copying the virtual data store to another data store.
57. (New) The method of claim 56 wherein the other data store comprise a virtual data store.
58. (New) The method of claim 54 wherein the original data store comprise a virtual data store.
59. (New) The method of claim 58 wherein the original data store is implemented as a current store and a time store.
60. (New) The method of claim 54 wherein the virtual data store comprises a logical unit.
61. (New) The method of claim 54, further comprising, before the generating step, the step of receiving a request to create the virtual data store.
62. (New) The method of claim 61 wherein the virtual data store is generated within one second of the request to create the virtual data store.
63. (New) An article of manufacture having a computer-readable program portion contained therein for providing data, the article comprising:

a computer-readable program portion for receiving a request to create a virtual data store that reflects a state of an original data store at a specified time, the specified time selected from a substantially continuous time interval;

a computer-readable program portion for receiving a storage protocol request for data at a specified address in the virtual data store; and

a computer-readable program portion for transmitting data stored in the original data store at the specified address at the specified time in response to the storage protocol request.

64. (New) A system for providing data, comprising:

an original data store;

a virtual data store that reflects a state of the original data store at a specified time selected from a substantially continuous time interval;

a virtual data store generator for generating the virtual data store;

a receiver for receiving a storage protocol request for data at a specified address in the virtual data store; and

a transmitter for transmitting data stored in the original data store at the specified address at the specified time in response to the storage protocol request.

65. (New) The system of claim 64, further comprising a storage protocol write request.

66. (New) The system of claim 65 wherein a standard I/O command comprises at least one of the storage protocol request and the storage protocol write request.

67. (New) The system of claim 66 wherein the standard I/O command comprises a SCSI command.

68. (New) The system of claim 67 wherein the standard I/O command comprises a Fibre Channel protocol request.

69. (New) A method of receiving data from a data store, the method comprising the steps of:

selecting a specified time that is selected from a substantially continuous time interval;

communicating to a storage device a request to create a virtual logical unit that reflects a state of a first logical unit at the specified time;

communicating to the storage device a storage protocol request for data in the virtual logical unit; and

receiving a response comprising the requested data as the data appeared in the first logical unit at the specified time.

70. (New) The method of claim 69 wherein the step of receiving a response further comprises receiving a substantially instantaneous response to the storage protocol request.

71. (New) The method of claim 70 wherein the first logical unit comprises at least one terabyte of data.

72. (New) The method of claim 70 wherein the response is received in less than 1 millisecond.

73. (New) An article of manufacture having a computer-readable program portion contained therein for receiving data from a data store, the article comprising:

a computer-readable program portion for selecting a specified time that is selected from a substantially continuous time interval;

a computer-readable program portion for communicating to a storage device a request to create a virtual logical unit that reflects a state of a first logical unit at the specified time;

a computer-readable program portion for communicating to the storage device a storage protocol request for data in the virtual logical unit; and

a computer-readable program portion for receiving a response comprising the requested data as the data appeared in the first logical unit at the specified time.